

ALAMAR

BROADWAY ROAD

STREET LIGHT IMPROVEMENTS

DEVELOPER

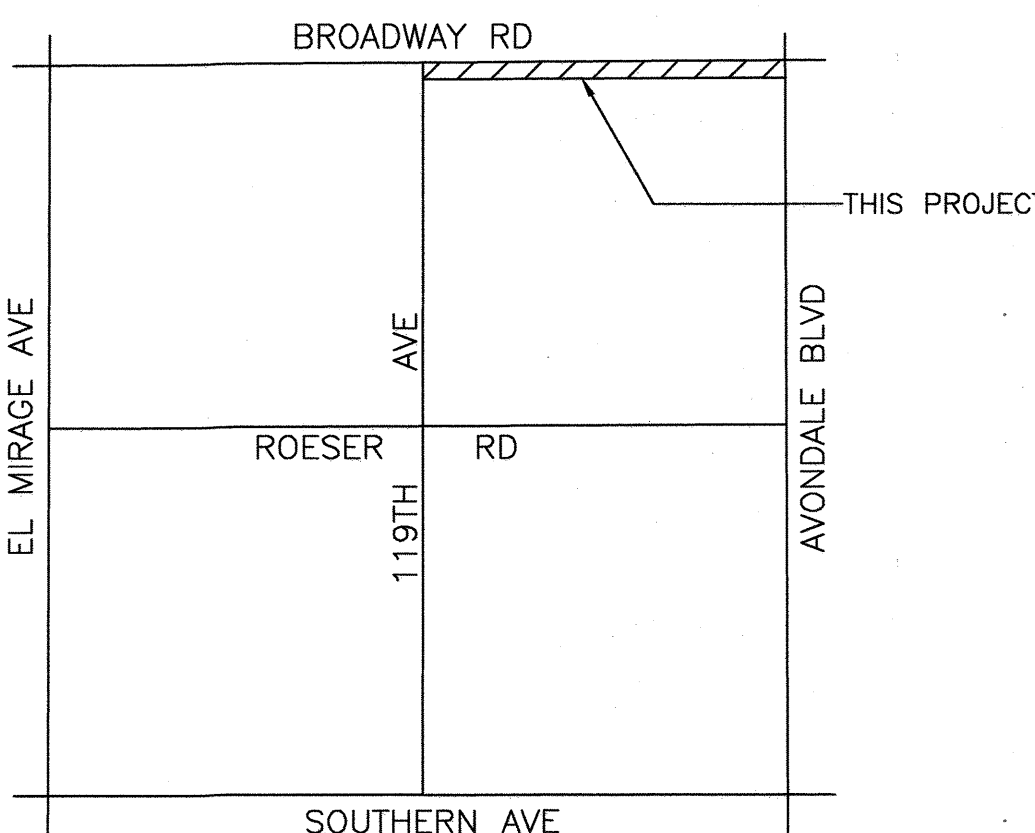
BROOKFIELD RESIDENTIAL
14646 N. KIERLAND BLVD, SUITE 165
SCOTTSDALE, AZ 85254
PHONE: (602) 903-7509
CONTACT: ROGER THEIS

ELECTRICAL ENGINEER

WRIGHT ENGINEERING CORPORATION
165 EAST CHILTON DRIVE
CHANDLER, ARIZONA 85225
PHONE: (480) 497-5829
FAX: (480) 497-5807
CONTACT: ADAM BOWERS

CIVIL ENGINEER

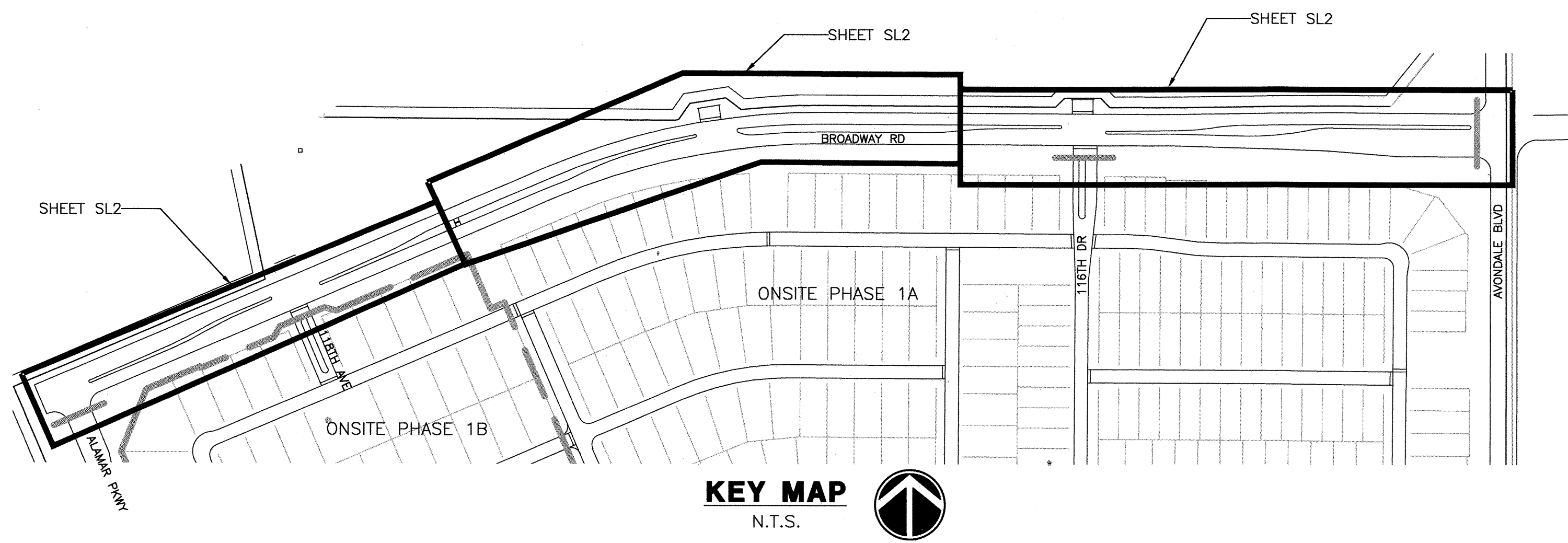
WOOD, PATEL & ASSOCIATES, INC
2051 WEST NORTHERN AVE, SUITE 100
PHOENIX, ARIZONA 85021
PHONE: (602) 335-8500
CONTACT: FRANK KOO, P.E.



VICINITY MAP
N.T.S.

BENCHMARK

BRASS CAP IN HAND HOLE AT
MCDOWELL ROAD AND AVONDALE
BOULEVARD AT THE NEC OF
SECTION 1, T1N, R1W, CNR
54000-1, ELEVATION 1000.426
(NAVD 88) AS SHOWN IN BOOK
694, PAGE 38, MCR.
DATE SHOT: 01/2007



SHEET INDEX:	
SHEET SL1	COVER SHEET
SHEET SL2	STREET LIGHT DESIGN
SHEET SL3	DETAIL SHEET
SHEET PH-1	PHOTOMETRICS

UTILITY CONFLICT NOTIFICATION

THESE PLANS HAVE BEEN SUBMITTED TO THE FOLLOWING UTILITY COMPANIES. WHERE THE WORK TO BE DONE CONFLICTS WITH ANY OF THESE UTILITIES, THE CONFLICTS SHALL BE RESOLVED AS SPECIFIED IN THE SPECIAL NOTES AND/OR AS OTHERWISE NOTED ON THESE PLANS. CONFLICTS ARISING DURING THE COURSE OF CONSTRUCTION FROM UNFORESEEN CIRCUMSTANCES SHALL BE REPORTED TO THE INTERESTED UTILITY COMPANY AND BE RESOLVED BY THEM AND THE DESIGN ENGINEER.

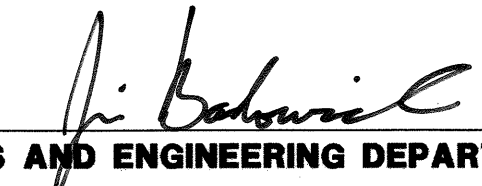
SALT RIVER PROJECT POWER	CRAIG EITEL	10/12/18
	COMPANY REPRESENTATIVE	DATE
ARIZONA PUBLIC SERVICE	KATHY GARCIA	10/12/18
	COMPANY REPRESENTATIVE	DATE
CENTURY LINK	CHRIS LERTIQUE	10/12/18
	COMPANY REPRESENTATIVE	DATE
COX COMMUNICATIONS	LIN MORRIL	10/12/18
	COMPANY REPRESENTATIVE	DATE
SOUTHWEST GAS	SUE NEWSOM	10/12/18
	COMPANY REPRESENTATIVE	DATE
S.R.V.W.U.A.	BOB MAURER	10/12/18
	COMPANY REPRESENTATIVE	DATE
ROOSEVELT IRRIGATION DISTRICT	STAN ASHBY	10/12/18
	COMPANY REPRESENTATIVE	DATE
EL PASO NATURAL GAS	RON BROWN	10/12/18
	COMPANY REPRESENTATIVE	DATE

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE "AS-BUILT" MEASUREMENTS AS SHOWN OR NOTED HEREON WERE MADE BY MYSELF OR UNDER MY SUPERVISION AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

SIGNATURE _____ DATE _____ REGISTRATION NUMBER _____

NAME/COMPANY:
ADDRESS:
CITY/STATE/ZIP CODE:
PHONE:

APPROVED BY:

DEVELOPMENT SERVICES AND ENGINEERING DEPARTMENT
THE CITY APPROVES THESE PLANS FOR CONCEPT ONLY AND ACCEPTS NO LIABILITY FOR ERRORS OR OMISSIONS.
11465 W. CIVIC CENTER DR.
SUITE 120
AVONDALE, AZ 85323
PHONE: (623) 333-4200
FAX: (623) 333-0420

2-27-19
DATE

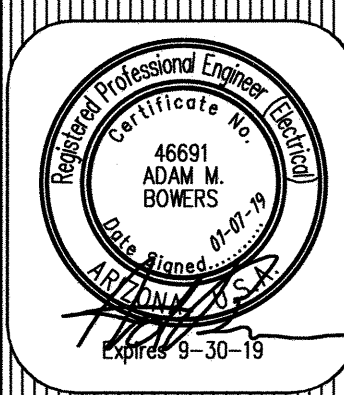
QUANTITIES LIST (STREET LIGHTS)		
TOTAL	UNIT	DESCRIPTION
7	EACH	133W LED WITH 40' MOUNTING HEIGHT
16	EACH	(2) 133W LED WITH 40' MOUNTING HEIGHT

WRIGHT ENGINEERING
PROJECT NO:
18184
DESIGN BY: NBG
DRAWN BY: NBG
CHECKED BY: AMB

WRIGHT
engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE: 480.497.5829 • FAX: 480.497.5807
www.wrightengineering.us

PROJECT: AVONDALE, ARIZONA
TITLE: ALAMAR BROADWAY RD
STREET LIGHT PLAN

SUBMITTALS/REVISIONS (DESCRIPTIONS)	
NO.	DATE
1	AUG 2018 1ST SUBMITTAL
2	OCT 2018 2ND SUBMITTAL

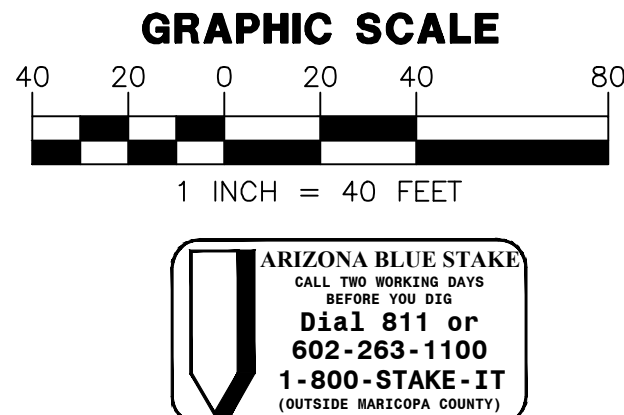
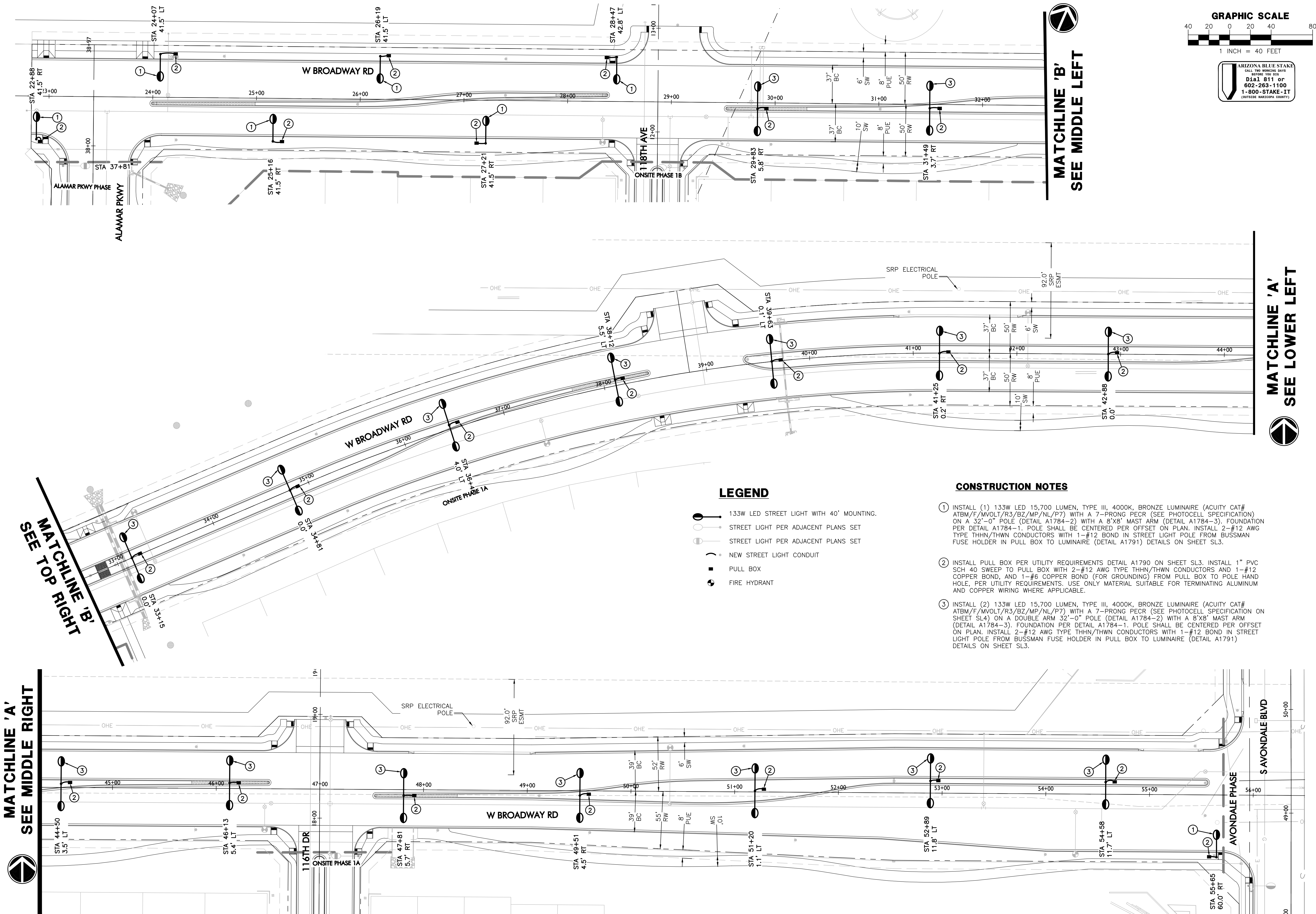


DRAWING NO:
SL1
OF 4

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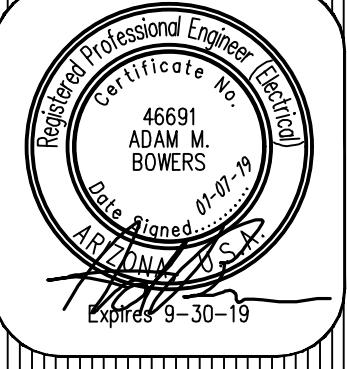
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PROJECT: TITLE:

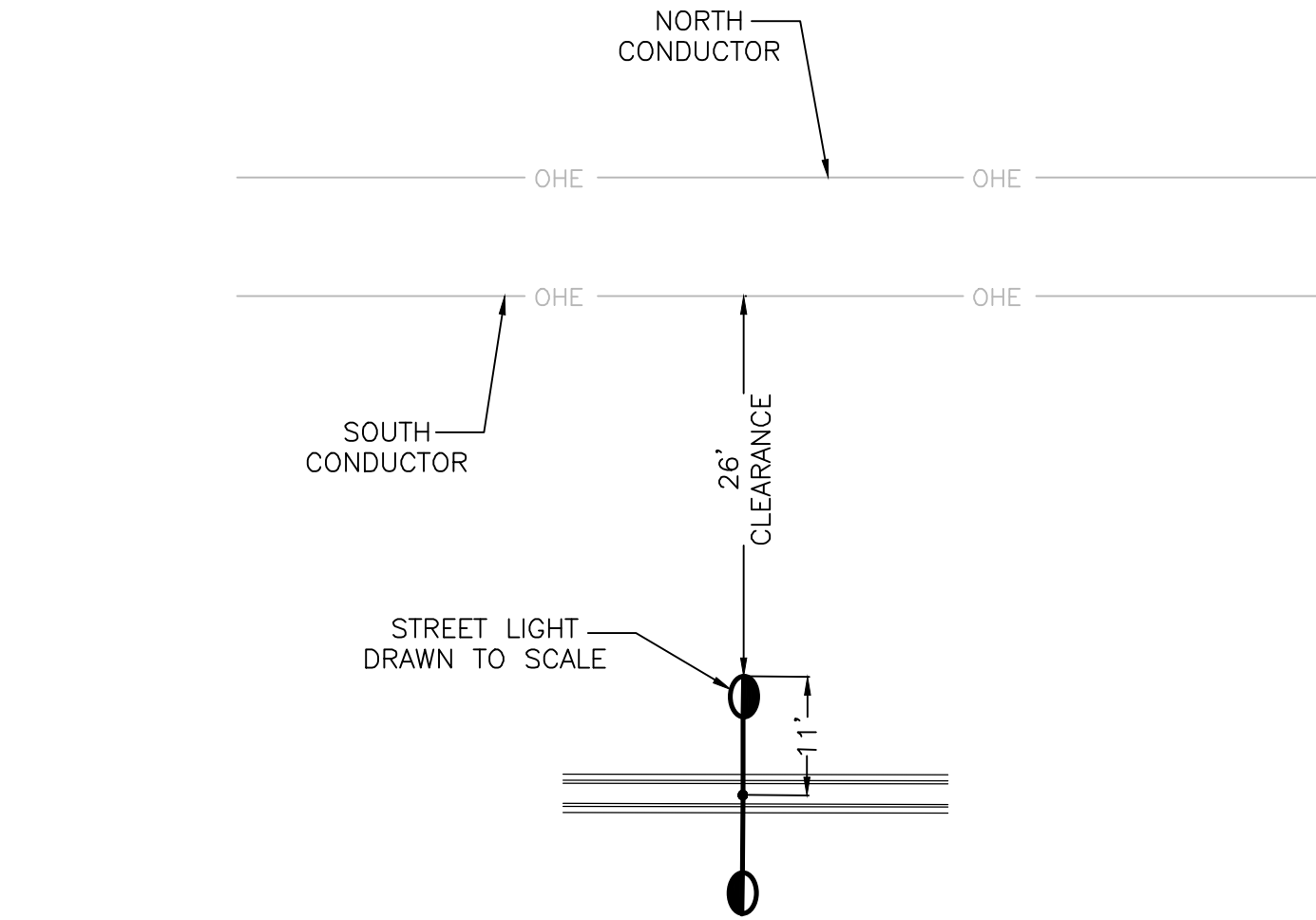
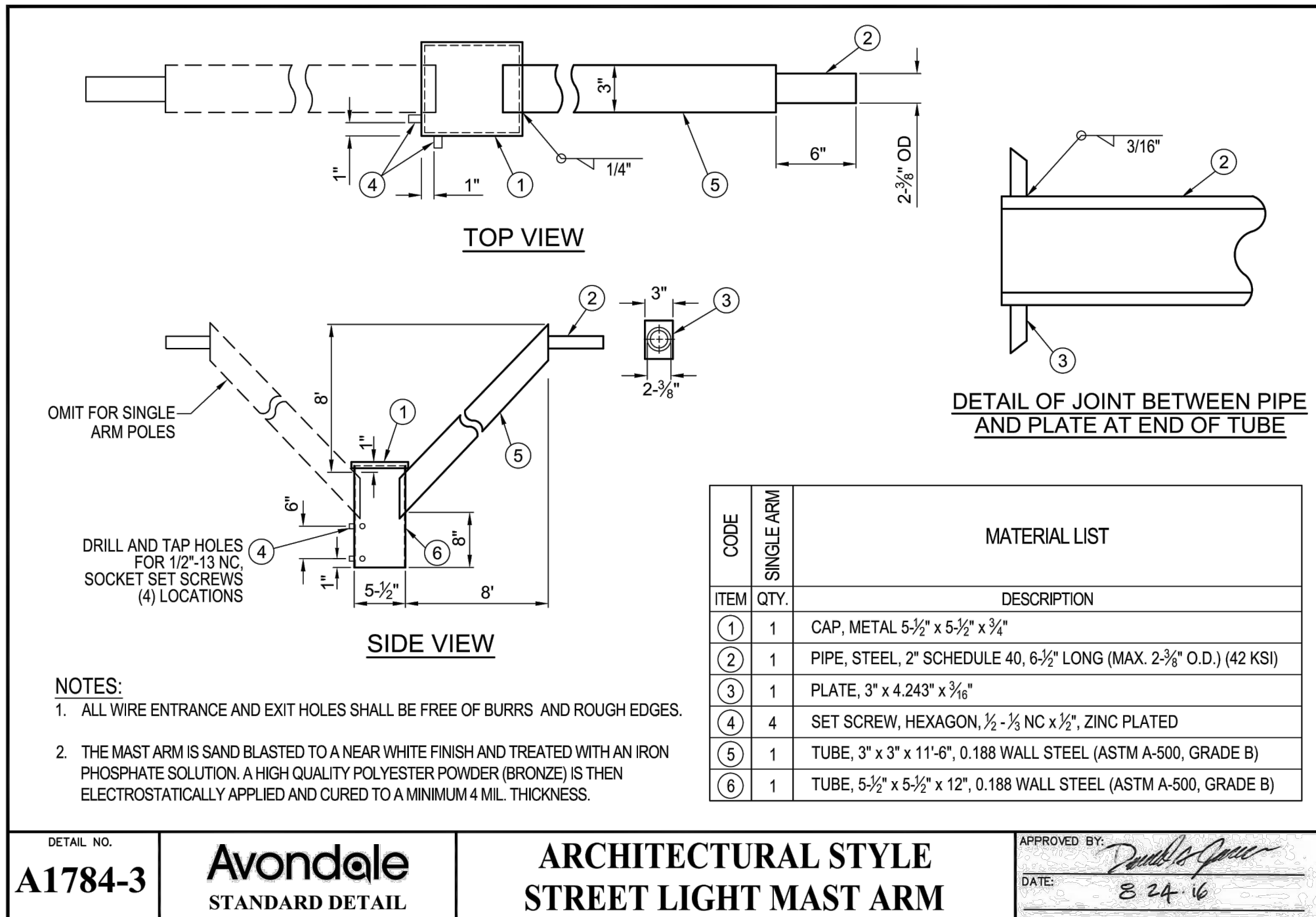
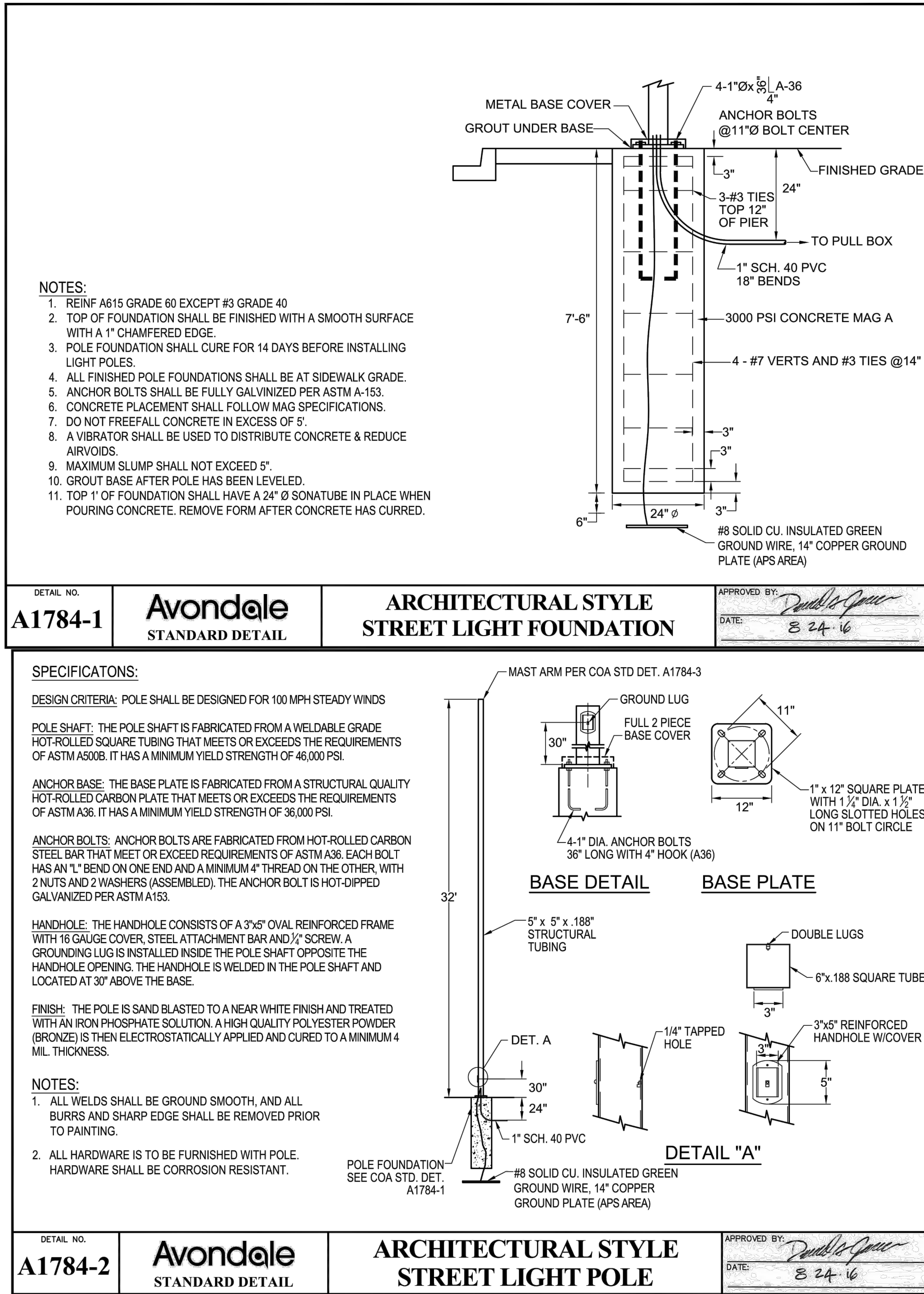
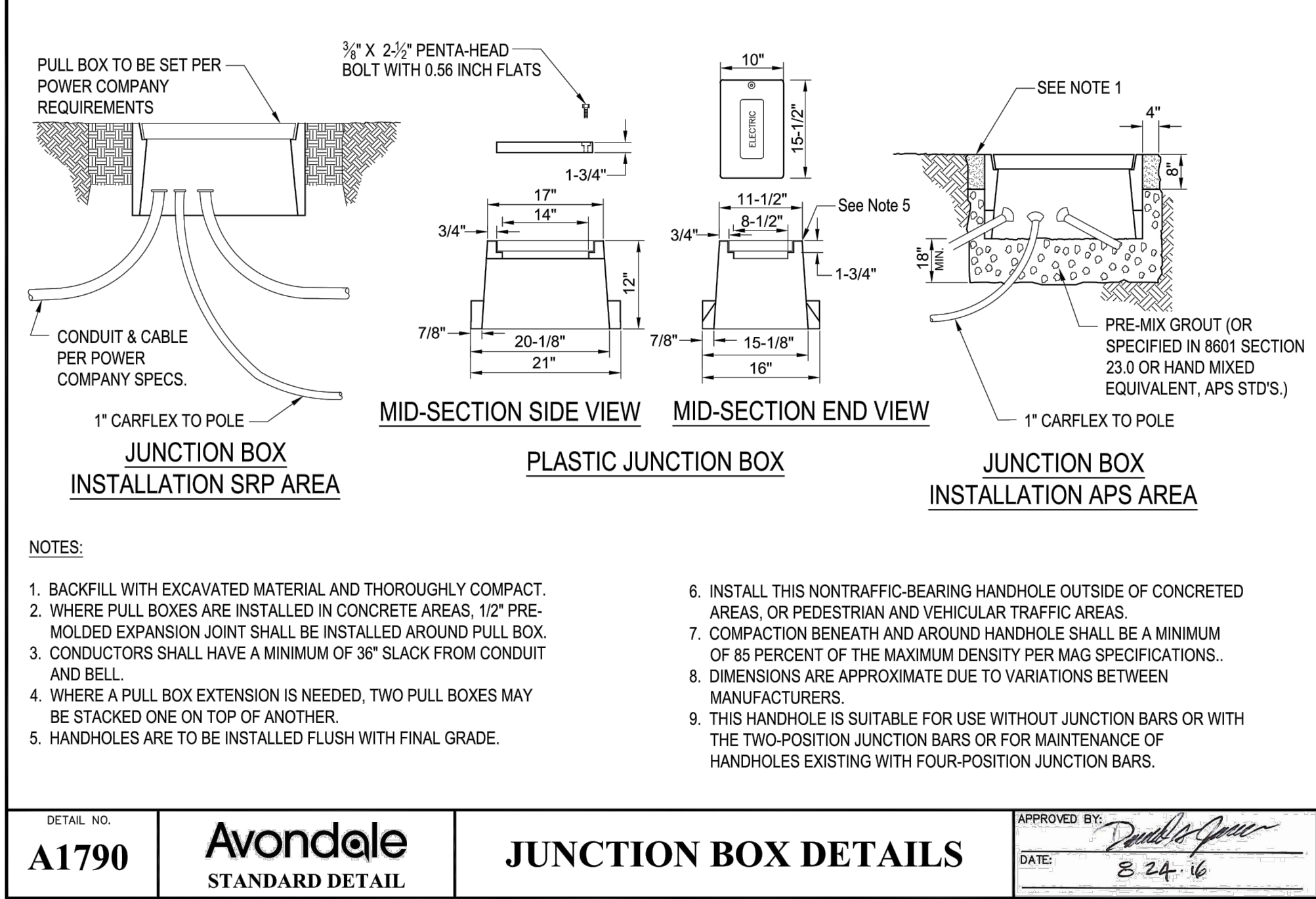
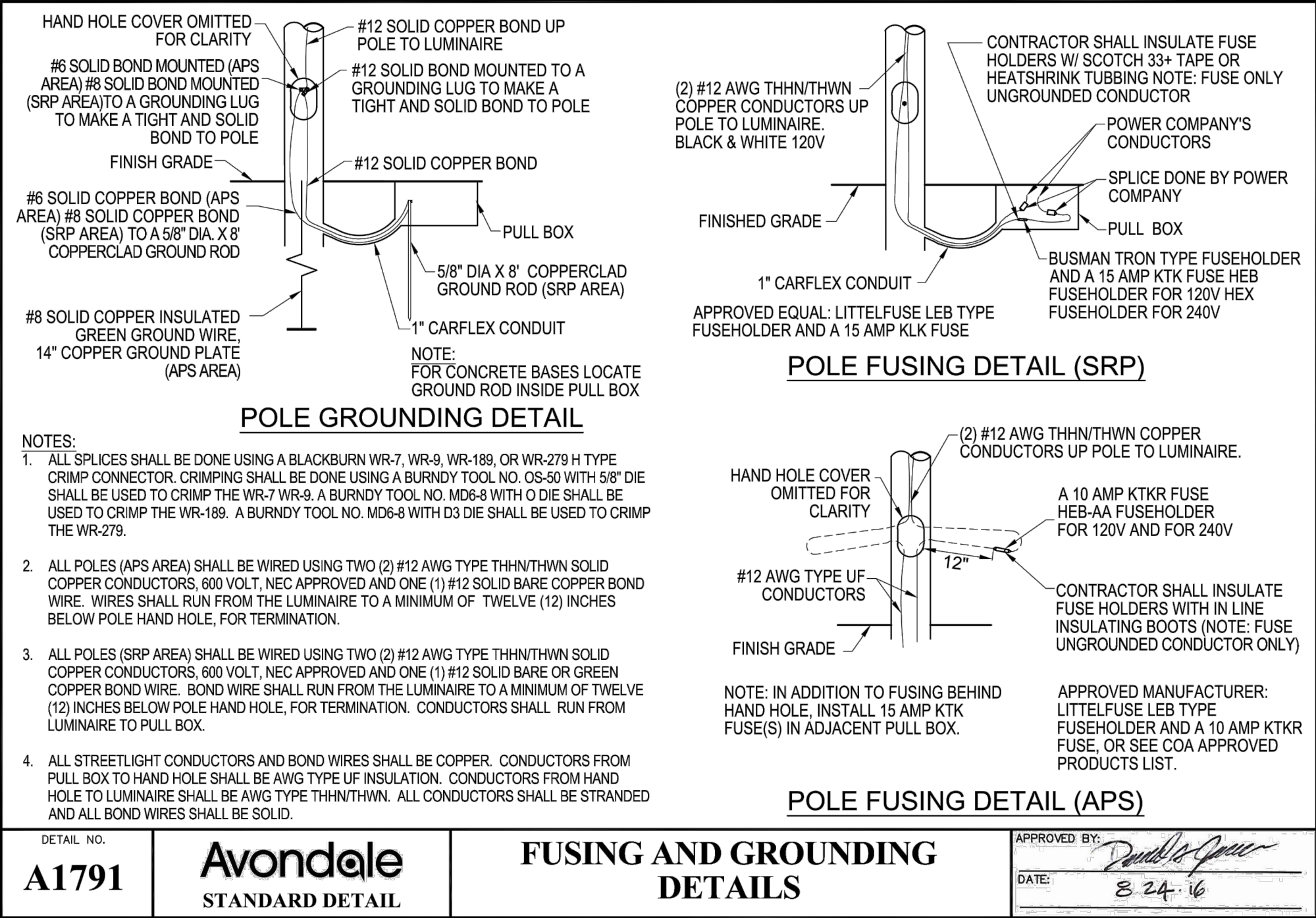
AVONDALE, ARIZONA
ALAMAR BROADWAY RD
STREET LIGHT PLAN

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	AUG 2018	1ST SUBMITTAL
2	OCT 2018	2ND SUBMITTAL



DRAWING NO:
SL2
OF 4

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1 SRP STREET LIGHT EASEMENT CLEARANCE

STA 52+89 & 54+88

PHOTOCELL SPECIFICATION

THE LUMINAIRE SHALL HAVE A 7-PRONG TWIST-LOCK PHOTO-ELECTRIC CONTROL RECEPTACLE (PECR) IN ACCORDANCE WITH ANSI C136.41-2013. THE DRIVER DIMMING LEADS SHALL BE WIRED TO PRONGS FOUR AND FIVE. THE PECR SHALL BE ROTATABLE UP TO 359 DEGREES. HOUSING SHALL PROVIDE 360 DEGREE STOP TO PREVENT THE INTERNAL TWISTING OF PECR WIRE ASSEMBLIES RESULTING IN POTENTIAL ELECTRICAL SHORT. THE PECR SHALL BE CONNECTED TO THE SAME VOLTAGE AS THE LUMINAIRE.

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PROJECT: TITLE:

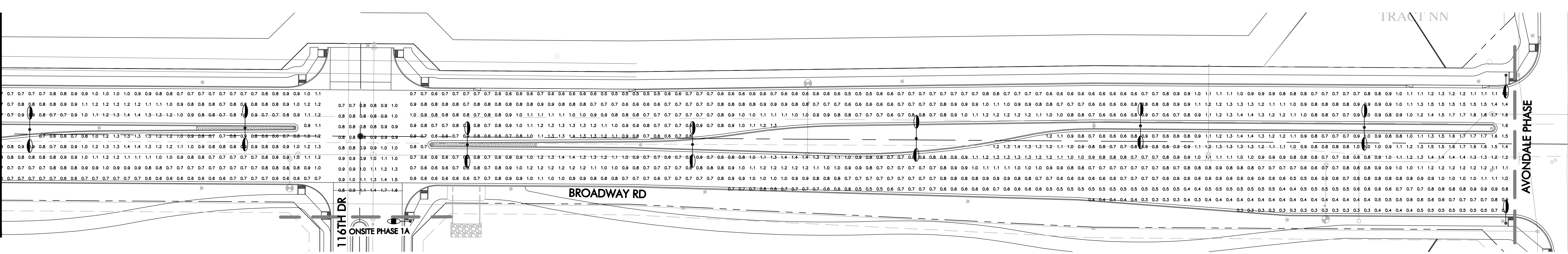
AVONDALE, ARIZONA
ALAMAR
ALAMAR BROADWAY RD
STREET LIGHT PLAN

NO.	DATE	SUBMITTALS/REVISIONS (DESCRIPTIONS)
1	AUG 2018	1ST SUBMITTAL
2	OCT 2018	2ND SUBMITTAL

Professional Engineer
46691
ADAM M. BOWERS
08/17/2018
08/24/2018
09/30/2018

DRAWING NO:
SL3
OF 4

MATCHLINE 'A'
SEE MIDDLE RIGHT



INT - BROADWAY RD & 116TH DR
54 points at z=0, sp 8ft by 8ft
HORIZONTAL FOOTCANDLES
Average 1.0
Maximum 1.7
Minimum 0.7
Avg:Min 1.39
Max:Min 2.43
Coef Var 0.23
UnifGrad 1.30

MATCHLINE 'A'
SEE TOP LEFT



SEE BOTTOM RIGHT
MATCHLINE 'B'

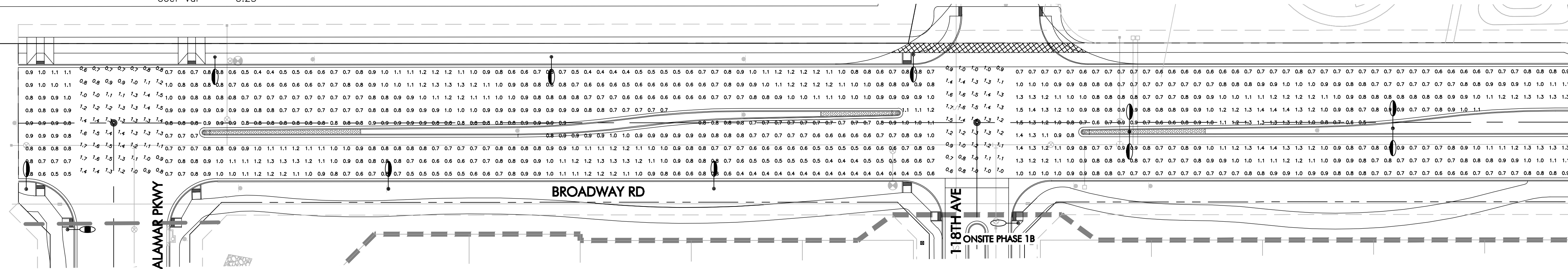
INT - BROADWAY RD & 119TH AVE
63 points
HORIZONTAL FOOTCANDLES
Average 1.2
Maximum 1.7
Minimum 0.6
Avg:Min 1.99
Max:Min 2.83
Coef Var 0.23

BROADWAY RD (1)
1841 points at z=0, sp 8ft by 8ft
ROADWAY LUMINANCE (CD/SQ METER) travel direction West - CIE_surface_R3 - q0 = 0.070
Average 0.9
Maximum 1.8
Minimum 0.3
Avg:Min 2.90
Max:Min 6.00
Coef Var 0.30
UnifGrad 1.67

INT - BROADWAY RD & 118TH AVE
45 points
HORIZONTAL FOOTCANDLES
Average 1.2
Maximum 1.7
Minimum 0.6
Avg:Min 1.99
Max:Min 2.83
Coef Var 0.21

LEGEND/DESIGN CRITERIA:

- 15700 LUMEN
8' X 8' MAST ARM
candela file 'ATBM_F_XXXXX_R3_XXXX.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.850, watts per luminaire = 133
mounting height= 40 ft
number locations= 61, number luminaires= 61
kw all locations= 8.1
- 6100 LUMEN
6' MAST ARM
candela file 'ATBS_G_XXXXX_R3_3K (1).ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.850, watts per luminaire = 50
mounting height= 32 ft
number locations= 17, number luminaires= 17
kw all locations= 0.8
- 4700 LUMEN
6' MAST ARM
candela file 'ATBS_E_XXXXX_R2_3K (1).ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.850, watts per luminaire = 40
mounting height= 32 ft
number locations= 103, number luminaires= 103
kw all locations= 4.1



MATCHLINE 'B'
SEE MIDDLE LEFT



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**PHOTOMETRIC CALCULATION
SHEET. FOR INFORMATION ONLY.**

PROJECT NAME:
ALAMAR
BROADWAY RD
STREETLIGHTING

WRIGHT ENG.
PROJECT NO: **18184**

DESIGN BY: NBG **PH-1**